

UTC PC1316 LINEAR INTEGRATED CIRCUIT

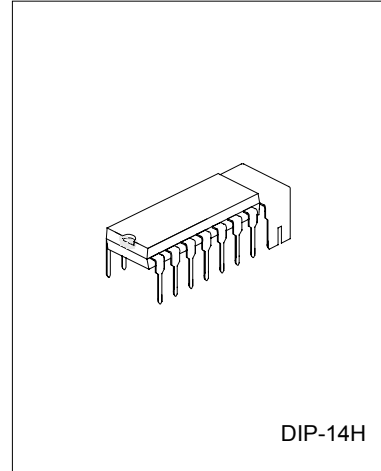
DUAL CHANNEL AUDIO POWER AMPLIFIER

DESCRIPTION

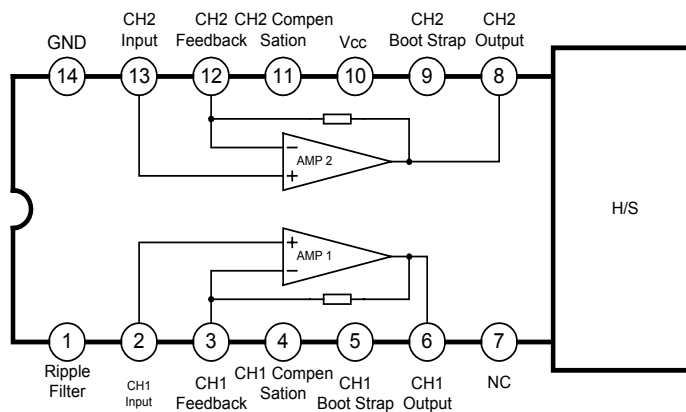
The UTC PC1316 is a monolithic integrated circuit, designed for the audio amplifier part in tape recorders and radio.

FEATURES

- *Wide operating voltage(3V~16V)
- *Low quiescent current
- *Low harmonic distortion
- *Large output power(2W, maximum)
- *Fine ripple rejection characteristic



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage(no signal)	Vcc	18	V
Supply Voltage(operating)	Vcc	16	V
Power Dissipation	PD	2	W
Operating Temperature	TOPR	-20 ~ 75	°C
Storage Temperature	TSTG	-40 ~ 150	°C

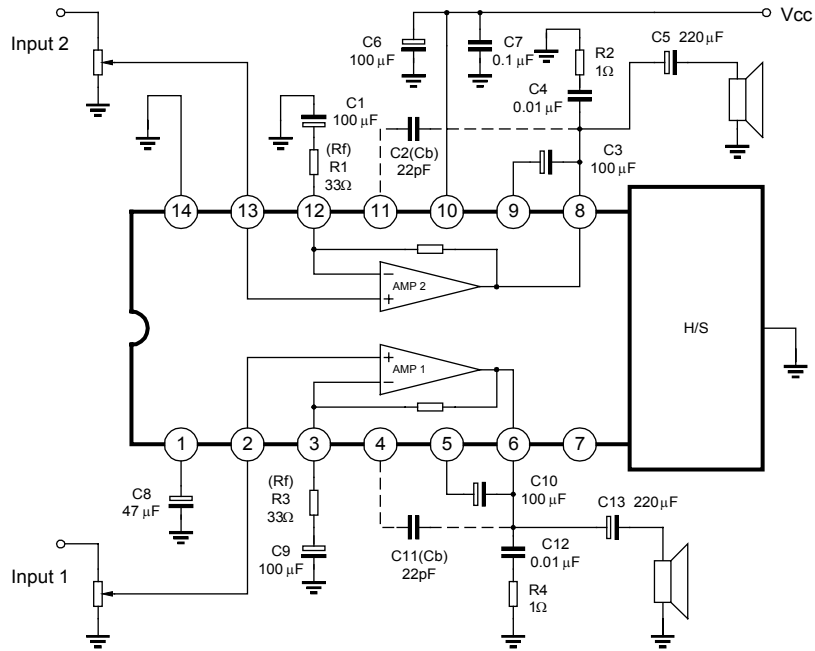
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ELECTRONIC CHARACTERISTICS

(Ta=25°C, Vcc=9V, Rf=33Ω, f=1kHz, RL=8Ω, unless otherwise specified)

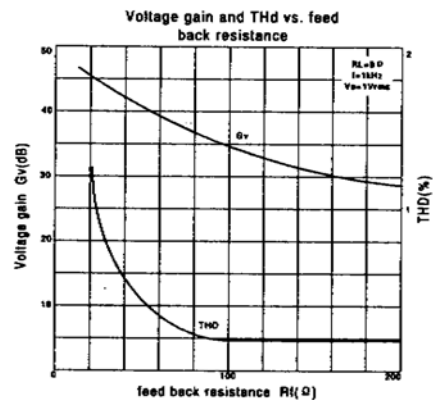
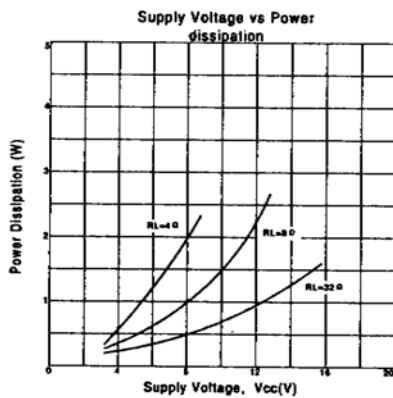
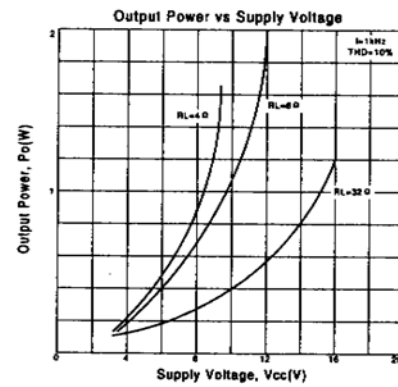
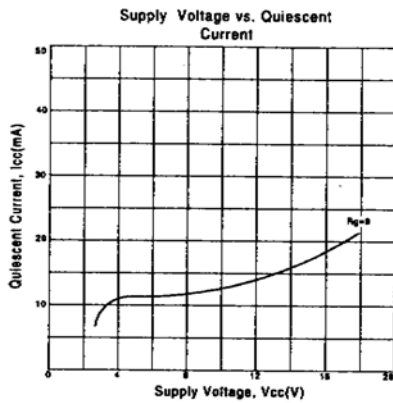
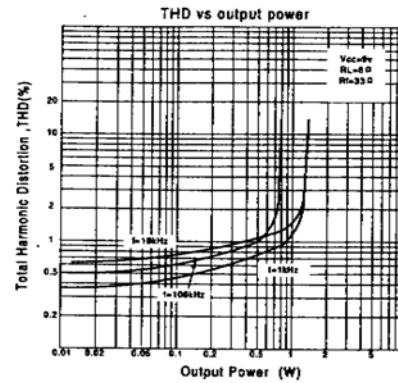
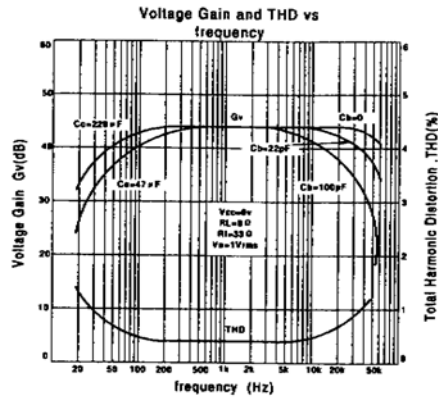
PARAMETER	TEST CONDITIONS	SYMBOL	MIN	TYP	MAX	UNIT
Quiescent Current	No Signal	ICCQ		10		mA
Voltage Gain	Po=0.25W, Rf=33Ω	Gv		44		dB
	Po=0.25W, Rf=120Ω	Gv		34		dB
Output Power	Vcc=12V, RL=8Ω, THD=10%	PO		2		W
	Vcc=9V, RL=4Ω, THD=10%	PO		1.6		W
Output Power	Vcc=9V, RL=8Ω, THD=10%	PO		1.2		W
	Vcc=6V, RL=4Ω, THD=10%	PO		0.7		W
	Vcc=6V, RL=8Ω, THD=10%	PO		0.5		W
Total Harmonic Distortion	Po=0.5W, Rf=33Ω	THD		0.8		%
	Po=0.5W, Rf=120Ω	THD		0.4		%
Noise Output Voltage	Rg=10kΩ	VNO		0.6		mV
Ripple Rejection Ratio	Rg=0, frip=100Hz, Vrip=0.3V	RR		50		dB
Channel Separation	Rg=0, Po=0.25W	CS		55		dB
Channel Balance	Po=0.25W	CB	-2	0	2	dB
Input Impedance		RI		5		MΩ

APPLICATION CIRCUIT



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TYPICAL PERFORMANCE CHARACTERISTICS



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